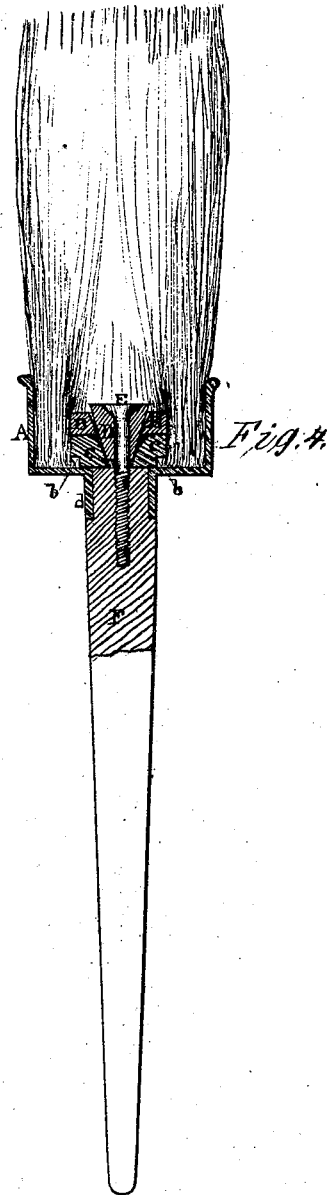
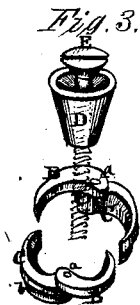
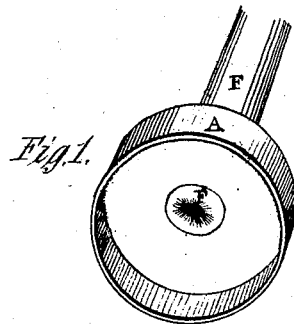


A. M. Donald,

Paint Brush.

No. 108,923.

Patented Nov. 1, 1870.



Witnesses
Ed. Hudson
Wm. Jack

Alvin M. Donald
Inventor.

United States Patent Office.

ALVIN McDONALD, OF WASHINGTON, ILLINOIS, ASSIGNOR OF ONE-HALF
HIS RIGHT TO JAMES M. WHITE, OF SAME PLACE.

Letters Patent No. 108,923, dated November 1, 1870.

IMPROVEMENT IN PAINT-BRUSHES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, ALVIN McDONALD, of the town of Washington, in the county of Tazewell and in the State of Illinois, have invented a new and useful Paint-Brush; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification; in which like letters of reference refer to like parts, and in which—

Figure 1 represents a view of the shell or ring in which the bristles are placed;

Figure 2, a plan view in detail of expanding segments;

Figure 3, a perspective view in detail of segments, cone, and screw;

Figure 4, a sectional view of brush, with handle complete; and

Figures 5 and 6, views in detail of segments.

Like letters in the different figures of the drawing indicate like parts.

This device is composed of expanding segments, provided with recesses on their bottom edges, and arranged around a truncated cone, the latter causing the segments to press the bristles against the shell of the brush, and also to turn the ends of the bristles in the recesses so as to secure them more firmly.

B C are the segments, which are pivoted together at *a*, their free ends finishing in a point, the lower part of the segment C having a recess, *b*, for retaining the ends of the bristles, (see figs. 3 and 4.)

Two of these coupled segments placed opposite each other form a circle, the segment B of each couple resting on the surface of each segment lettered C.

These are placed at the bottom of the shell A of brush, and a cone, D, through whose axis a screw, E, freely passes, the end of latter screwing into the butt of the handle F, which comes flush with the hole at the bottom of the shell A, inclosed by a rim for further securing the handle.

The shell A is made circular, and large enough to admit the requisite quantity of bristles for any-sized brush.

The operation of this device is as follows:

The segments B C and B C are placed around the hole in the butt of the brush and the bristles inserted. The cone and screw are then inserted, the latter drawing the cone by its inclined face against each of the segments, causing the expansion of the latter, and consequent pressure against the bristles, which are thus tightly confined between the segments and the shell A. The recess *b*, at the bottom of each of the segments next to the butt of the handle, retains the end of the bristles, and prevents them from drawing or working out. When the bristles are worn out fresh ones are to be inserted.

I am aware of the patent of Jacob Rayls, January 25, 1870, in which segments are used, but it will be observed that they are constructed in two parts only, while I make these in four parts, pivoting or hanging two of each together, and provide them with recesses *b*, so that the ends of the bristles will be caused to turn therein, (see fig. 4,) thus avoiding any liability of their drawing or working out.

Having thus fully described my invention,

What I claim therein as new, and desire to secure by Letters Patent, is—

The segments B C pivoted together at *a*, their free ends finishing in a point, and the lower part of segment C having a recess, *b*, for retaining the ends of the bristles, in combination with the cone D, screw E, shell A, and handle F, all as shown and set forth.

In testimony that I claim the foregoing paint-brush, I have hereunto set my hand this 10th day of May, A. D. 1870.

ALVIN McDONALD.

Witnesses:

EDMUND THURLOW,
WM. JACK.